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About SwitchLinc On/Off Dual-Band

Features and Benefits

• Controls virtually all load types
• Can be remotely controlled from any INSTEON controller
• 100-277VAC capable (can be used to control 277V commercial lighting circuits)
• 17A resistive capacity (100-277VAC)
• 1,800 Watt incandescent capacity (100-277VAC)
• 1 HP motor (at 120VAC only)
• 10A ballast (100-277VAC)
• 50/60 Hz electricity automatically detected
• Beeper and dual-color LED for easy setup and linking.
• Dimmable status LED acts as a nightlight when switch is off
• Responds to and sends X10 commands
• Wires in like a standard wall switch (neutral connection required)
• Supports SwitchLinc wireless 3-way and 4-way circuits
• Two-year warranty

What’s in the Box?

<table>
<thead>
<tr>
<th>In the Box</th>
<th>Tools Needed</th>
<th>Optional Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>SwitchLinc On/Off</td>
<td>Slotted and Phillips screwdrivers</td>
<td>INSTEON app</td>
</tr>
<tr>
<td>Quick Start Guide</td>
<td>Wire cutter/stripper</td>
<td>SmartLinc Hub</td>
</tr>
<tr>
<td>2 screws and 4 wire nuts</td>
<td>Voltage meter</td>
<td></td>
</tr>
</tbody>
</table>
# Cautions and Warnings

## CAUTIONS AND WARNINGS

Read and understand these instructions before installing and retain them for future reference.

This product is intended for installation in accordance with the National Electric Code and local regulations in the United States or the Canadian Electrical Code and local regulations in Canada. Use indoors only. This product is not designed or approved for use on power lines other than single-phase voltages between 100V and 277V, 50/60Hz. Attempting to use this product on non-approved powerlines may have hazardous consequences.

Recommended installation practices:

- Use only indoors or in an outdoor-rated box.
- Be sure that you have turned off the circuit breaker or removed the fuse for the circuit into which you are installing this product. Installing this product with the power on will expose you to dangerous voltages.
- The wires connecting SwitchLinc to the incoming power must be protected by a fuse or circuit breaker of 20A or less.
- Connect using only copper or copper-clad wire.
- This product may feel warm during operation. The amount of heat generated is within approved limits and poses no hazards. To minimize heat buildup, ensure the area surrounding the rear of this product is as clear of clutter as possible.
- To reduce the risk of overheating and possible damage to other equipment, do not use this product to control loads in excess of the specified maximum(s) or install in locations with electricity specifications which are outside of the product’s specifications. If this device supports dimming, please note that dimming an inductive load—such as a fan or transformer—could damage the dimmer, the load-bearing device or both. If the manufacturer of the load-bearing device does not recommend dimming, use a non-dimming INSTEON on/off switch. USER ASSUMES ALL RISKS ASSOCIATED WITH DIMMING AN INDUCTIVE LOAD.

### Identifying the Electrical Wires in Your Home

- **Line** – usually black, may also be called Hot, Live or Power, carries 100-277VAC electricity into the wall box.
- **Neutral** – usually a white wire bundle, commonly daisy-chained from box to box.
- **Load** – usually black, from a separate cable jacket.
- **Ground** – Bare copper wire or metal fixture (if grounded).

If installing in a commercial application, please follow standard commercial wiring practices.

### IMPORTANT!

- Each INSTEON product is assigned a unique INSTEON I.D., which is printed on the product’s label. Please take note of each product’s I.D. for future reference.
- If you have any difficulties or questions, consult an electrician. If you are not knowledgeable about or comfortable with electrical circuitry, have a qualified electrician install the product for you.

## Tools Needed

- Flathead screwdriver
- Wire cutter/stripper
- Phillips screwdriver
- Voltage meter
Installation

Installation – Circuit with 1 Switch (a.k.a. 2-way circuit)

1) At electrical panel, turn off circuit breaker(s) and/or remove fuse(s) feeding wall box. Verify that the power is off before continuing.
2) Remove wallplate from the switch. Unscrew switch and gently pull out.
3) Disconnect wires from switch.
4) Turn on power.
5) Use a voltage meter to identify the line and load wires connected to the switch.
6) Identify neutral and ground wires.
7) Turn off power.
8) Connect wires as per table/diagram (confirm firm attachments with no exposed wire).
9) With LEDs on left, gently place SwitchLinc into wall box and screw into place.
10) Turn on power.

SwitchLinc and its connected load will turn on.
11) Verify SwitchLinc is working properly by tapping SwitchLinc on and off.

SwitchLinc and its connected load will turn on and off.
12) Reinstall wallplate.

Installation – Circuit with 2 Switches (a.k.a. 3-way circuit)

Circuits with 2 switches are called 3-way circuits. Both switches in a 3-way circuit need to be replaced by SwitchLincs (and/or other INSTEON devices).

1) Turn off circuit breaker(s) and/or remove fuse(s) feeding wall boxes (verify that power is off).
2) Pull both switches from their wall boxes (each switch will have no less than 3 wires).
3) Remove wires from existing switches.
4) Make sure wires are safely separated from each other and turn power back on.
5) Using a voltage meter measure each wire to ground in both boxes until you find the single wire supplying 120V (line).
   a. We will now refer to that location as Box 1.
   b. The other box will have the load wire. That will be Box 2.
6) Turn power back off.

In Box 1 (Line box)
7) Connect bare SwitchLinc ground to bare ground wire or ground screw in wall box.
8) Connect SwitchLinc white wire to neutral wire(s) in wall box (usually white).
9) Using a wire nut, cap SwitchLinc red wire.
10) Connect SwitchLinc black wire to Line wire in wall box (usually black) along with one traveler wire running between boxes. (preferably black) Note color of this traveler – it will carry 120V/line voltage to Box 2.
11) Cap unused traveler.

### Table: SwitchLinc Wire vs Wall Box Wires

<table>
<thead>
<tr>
<th>SwitchLinc Wire</th>
<th>Wall Box Wires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bare copper</td>
<td>Ground (commonly bare copper, green wire or green screw)</td>
</tr>
<tr>
<td>White</td>
<td>Neutral (commonly white)</td>
</tr>
<tr>
<td>Red</td>
<td>Load (connected to light)</td>
</tr>
<tr>
<td>Black</td>
<td>Line (120V to Ground)</td>
</tr>
</tbody>
</table>

If the wires cannot be detached by unscrewing them, cut the wires where they enter the switch, then strip 1/2" of insulation off the ends.
In Box 2 (Load box)
12) Connect SwitchLinc bare wire to bare ground wire or ground screw in wall box
13) Connect SwitchLinc white wire to neutral wire(s) in wall box (usually white)
14) Connect SwitchLinc red wire to load wire
15) Connect SwitchLinc black wire to same color traveler from Box 1 carrying Line (usually black)
16) Cap unused traveler wire
17) With LEDs on left, gently place SwitchLincs into their wall boxes and screw in place
18) Turn power back on
   *SwitchLincs and connected load will turn on (only SwitchLinc in Box 2 will operate load)*
19) Add both SwitchLincs to a group. See “Groups”
20) Verify both SwitchLincs are working properly by tapping on and off on each SwitchLinc
   *Both SwitchLincs and the connected load will remain in synch*
21) Reinstall wallplates

**Installation – Circuit with 3 (or more) Switches**

Circuits with 3 or more switches are called 4-way (or 5-way, etc.) All switches in 3-way/4-way circuits need to be replaced by INSTEON devices.

1) Turn off circuit breaker(s) and/or remove fuse(s) feeding wall boxes (verify that power is off)
2) Pull all three switches from their wall boxes (4-way (and higher) switches have 3 or 4 wires)
3) Remove wires from existing switches
4) Make sure wires are safely separated from each other and turn power back on
5) Using a voltage meter measure each wire to ground in all three boxes until you find the single wire supplying 120V (line)
   a. We will now refer to that location as Box 1
   b. The location having 2 sets of matching pairs of wires will be Box 2 (i.e. 2 reds and 2 blacks, or other matching colors). These are 2 travelers from Box 1 and 2 travelers leading to Box 3
   c. The last box will have the load wire. That will be Box 3
6) Turn power back off

**In Box 1 (Line box)**
7) Connect SwitchLinc bare wire to ground
8) Connect SwitchLinc white wire to neutral
9) Cap SwitchLinc red wire
10) Connect SwitchLinc black wire to line plus one traveler (preferably black)
and note color of traveler you are using as this will carry line voltage to Box 2

11) Cap unused traveler wire

**In Box 2 (Traveler box)**

12) Connect SwitchLinc bare wire to ground
13) Connect SwitchLinc white wire to neutral\(^4\)
14) Cap SwitchLinc red wire
15) Connect SwitchLinc black wire to same color traveler from Box 1 that you connected to line along with same color traveler wires leading to Box 3
16) Cap the last unused traveler wire(s)

**In Box 3 (Load box)**

17) Connect SwitchLinc bare wire to ground
18) Connect SwitchLinc white wire to neutral
19) Connect SwitchLinc red wire to load
20) Connect SwitchLinc black wire to line traveler from Box 2 (Line traveled from Box 1 through 2 into 3 usually black)
21) Cap unused traveler wire
22) With LEDs on left, gently place SwitchLincs into wall boxes and screw in place
23) Turn power back on

"SwitchLincs and connected load will turn on"

24) Add all SwitchLincs to a group. See “Groups”
22) Verify all SwitchLincs are working properly by tapping each on and off

"All SwitchLincs and the connected load will remain in synch"

25) Reinstall wallplates

---

\(^4\) If neutral is not available in this box; use other unused traveler from Box 1 to carry neutral to Box 2. Label and mark any differently colored wire being connected to neutral with a piece of white tape to flag it as neutral.
Local Control

Follow these instructions to control the connected light/load (as well as any responders) from the SwitchLinc paddle.

<table>
<thead>
<tr>
<th>Paddle</th>
<th>Tap</th>
<th>Press and hold</th>
<th>Double-tap</th>
<th>LEDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top</td>
<td>On</td>
<td>On</td>
<td>On</td>
<td>Top LED on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sends brighten to responders</td>
<td>Sends fast-on to responders</td>
<td></td>
</tr>
<tr>
<td>Bottom</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Bottom LED on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sends dim to responders</td>
<td>Sends fast-off to responders</td>
<td></td>
</tr>
</tbody>
</table>

Setup

SwitchLinc is fully configurable using home automation software (such as HouseLinc). Software will make it easy to set up controller-responder links, synchronize groups, arrange multi-device scenes and adjust device properties.

**INSTEON Controllers, Responders and Links**

Let’s define a few terms:

- The device initiating an INSTEON message is called a **controller**.
- The device receiving the INSTEON message is called a **responder**.
- The association between the controller and responder is called a **link**.

![Link Diagram]

Please note that a link is one way. If you wish to have two-way control, simply repeat the link setup process from the responder to the controller. Most INSTEON devices can store hundreds of links, and each individual link can have its own properties (e.g., 50% brightness at a 4-second ramp rate). Furthermore, a controller can simultaneously control from one to hundreds of responders using groups and scenes.

**Make SwitchLinc a Responder**

Configure using home automation software (such as HouseLinc) or follow the steps below to control SwitchLinc from another INSTEON device.

1) Press and hold controller button until it beeps.\(^{10}\)

   Controller LED will start blinking.

---

\(^{10}\) If the controller does not have a beeper, wait until its LED begins blinking.
2) Tap SwitchLinc on (or off if desired for the link).
   Load will be on (or off).

3) Press and hold SwitchLinc Set button until it double-beeps.
   Controller LED will stop blinking.
   Unit will double-beep.\(^{11}\)

4) Test by tapping controller button on and off.
   SwitchLinc will respond appropriately.

**Note:** The link just created is one-way. See *Make SwitchLinc an INSTEON Controller* to add another link to create a two-way link and keep the two products in synch.

---

### Make SwitchLinc a Controller

Configure using home automation software (such as HouseLinc) or follow the steps below to control an INSTEON device from SwitchLinc.

1) Press and hold SwitchLinc set button until it beeps.
   *SwitchLinc LED will start blinking green.*

2) Adjust the responder(s) to the state you want when scene is activated from SwitchLinc (e.g., 50%, 25% or even off).

3) Press and hold responder Set button until it double-beeps (or until its LED flashes).
   *SwitchLinc LED will stop blinking.*
   *Responder LED will stop blinking and unit will double-beep*

4) Test by tapping SwitchLinc paddle on and off.
   *Responder will toggle between the scene on-level and off*

5) If you wish to add another responder, repeat steps 1-5 (or see *Add Multiple Responders*).

**Notes:**
- The link just created is one-way. See *Make SwitchLinc an INSTEON Responder* to add another link to create a two-way link and keep the two products in synch.

---

### Groups (Synchronizing Devices)

Devices in a group share all the same settings (e.g., on-level, ramp rate). This keeps all group members synchronized. Every device in a group is both a controller of and responder to all the other devices. The most common example of a group is a 3-way lighting circuit with 2 switches, such as switches at either end of a hallway.

Configure using home automation software (such as HouseLinc) or follow the steps below to set up a 3-way circuit with two switches. For simplicity, we will assume that the desired group level is on.

**Example: Set up a 3-way circuit with two switches, A and B**

1) Turn A and B on.
2) Press and hold A set button until it beeps (or LED blinks).
   *A’s LED will start blinking green.*
3) Press and hold B set button until it double-beeps (or LED flashes).
   *B will double-beep.*
   *A will double-beep and its LED will stop blinking.*
4) Press and hold B set button until it beeps (or LED blinks).

---

\(^{11}\) Most models
B LED will start blinking green.

5) Press and hold A set button until it double-beeps (or LED flashes).
   A will double-beep.
   B will double-beep and its LED will stop blinking.

6) Test the group by controlling the Load from A and then B.
   The load, A’s LED and B’s LED will all remain in synch.

---

**Scenes**

INSTEON scenes allow a controller to simultaneously activate multiple responders at individual pre-programmed levels. Home automation software (such as HouseLinc) is helpful in setting up and maintaining scenes, especially larger ones. Configure scenes using software or follow the steps below.

**Example: Create a scene with a single controller and SwitchLinc as a responder/member**

1) Press and hold controller Set button until it beeps.  
   Controller LED will start blinking.

2) Tap controller Set button.
   Controller will beep.
   Controller LED will double-blink.

3) Tap SwitchLinc on (or off if desired for the link).
   Load will be on (or off).

4) Press and hold SwitchLinc Set button until it double-beeps.
   Controller LED will continue blinking and unit will double-beep.

5) For each additional scene member:
   a. Adjust device to desired scene state.
   b. Press and hold its Set button.

6) Tap controller Set button.
   Controller LED will stop blinking.

7) Test by tapping controller button on and off.
   SwitchLinc and other scene responders will all respond appropriately.

---

**Remove SwitchLinc as a Responder**

If you no longer want a controller button to control SwitchLinc, configure using home automation software (such as HouseLinc) or follow the steps below to remove SwitchLinc’s responder link. **Note:** If you ever wish to uninstall SwitchLinc, it is important that you remove all SwitchLinc responder links. Otherwise, controllers will repetitively retry commands, creating network delays.

1) Press and hold controller Set button until beep.  
   LED will start blinking.

2) Press and hold controller Set button until it beeps again.
   LED will continue blinking.

3) Press and hold SwitchLinc Set button until double-beep.
   Controller LED will stop blinking.

4) Test by tapping controller button on and off.
   SwitchLinc will no longer respond.

---

12 If the controller does not have a beeper, wait until its LED begins blinking.
13 If the controller does not have a beeper, wait until its LED begins blinking.
**Remove SwitchLinc as a Controller**

If you no longer want SwitchLinc to control another device (or are removing SwitchLinc from your INSTEON network), it is important that you remove the responder link from SwitchLinc. Configure using home automation software (such as HouseLinc) or follow the steps below for each responder.

1) Press and hold SwitchLinc Set button until beep.  
   **LED will start blinking green.**

2) Press and hold SwitchLinc Set button until beep.  
   **LED will start blinking red.**

3) Press and hold responder Set button until double-beep (or LED blinks).  
   **SwitchLinc will double-beep and its LED will stop blinking.**

4) Test by tapping SwitchLinc on and off.  
   **Responder will not respond.**

**Make SwitchLinc a Controller of Multiple Responders**

Configure using home automation software (such as HouseLinc) or follow the steps below to make SwitchLinc a controller of multiple responders.

1) Press and hold SwitchLinc Set button until it beeps.  
   **SwitchLinc LED will start blinking green.**

2) Tap SwitchLinc Set button.  
   **SwitchLinc LED will double-blank green.**

3) For each responder you are adding:  
   a. Tap on/off or press and hold to adjust responder to desired state.  
   b. Press and hold responder Set button until it beeps (or LED flashes).  
   **SwitchLinc will double-beep.**

4) After all responders have been added, tap SwitchLinc Set button.  
   **SwitchLinc LED will stop blinking.**

5) Test by tapping SwitchLinc on and off a couple of times.  
   **All the responders added will respond.**

**Remove SwitchLinc as a Controller of Multiple Responders**

Configure using home automation software (such as HouseLinc) or follow the steps below to unlink multiple responders from SwitchLinc.

1) Press and hold SwitchLinc Set button until it beeps.  
   **SwitchLinc LED will start blinking green.**

2) Press and hold SwitchLinc Set button again until it beeps again.  
   **SwitchLinc LED will start blinking red.**

3) Tap SwitchLinc Set button.  
   **SwitchLinc LED will double-blank red.**

4) For each responder you are removing, press and hold responder Set button until unit beeps and/or LED flashes.

5) Tap SwitchLinc Set button.  
   **SwitchLinc LED will stop blinking.**

6) Test by tapping controller button a couple of times  
   **All responders removed will not respond.**
**Change LED Brightness**
Configure using home automation software (such as HouseLinc) or follow the steps below to change the brightness level of SwitchLinc’s LED.

1) Press and hold SwitchLinc Set button until it beeps.  
   LED will start blinking green.
2) Press and hold Set button until it beeps again.  
   SwitchLinc LED will start blinking red.
3) Press and hold Set button until it beeps a third time.  
   SwitchLinc LED will stop blinking and turn off.  
   SwitchLinc LED will illuminate at current LED brightness level.
4) Use SwitchLinc paddle to adjust LED brightness:  
   - Press and hold paddle top to brighten.  
   - Press and hold paddle bottom to dim (fully off for dimmest).
5) Once you have reached the desired brightness for the LED, tap Set button.  
   SwitchLinc LED will remain at new desired brightness.  
   SwitchLinc will double-beep.

**Error Blink**
This setting is only adjustable via software (such as HouseLinc). SwitchLinc LED will blink red for a few seconds if one or more responders do not acknowledge a message.

**Beep on Button Press**
Default = off. This setting is adjustable via software or a central controller only.

**Blink on Traffic**
This setting is only adjustable via software (such as HouseLinc). SwitchLinc LED will blink red to indicate noise on the powerline.

**Factory Reset**
Factory Reset clears all user settings from SwitchLinc including INSTEON scenes, X10 addresses, etc.

1) Pull out Set button to create an air gap See Air Gap (Removing Power).
2) Wait 10 seconds.
3) Press and hold the Set button.  
   SwitchLinc will begin to emit a long beep.
4) Don’t release Set button until beeping stops.
5) Release Set button.  
   After a few seconds, SwitchLinc will double-beep.  
   The load/light(s) will turn on.  
   LED will return to default brightness.

**Phase Detect Beacon**
SwitchLinc On/Off Switch Dual-Band automatically detects the electrical phases in your home (via communications with other dual-band devices on the other phase). This is only important if you have powerline-only products in a building with multiple phases (split-single or 3-phase).
1) Tap Set button 4 times quickly.
   *SwitchLinc will start beeping once per second.*
   *LED will turn green.*
2) Check the LED behavior of other dual-band devices.
   a. If the other dual-band device is blinking green, it is on the other phase.
      *Device connects the phases to SwitchLinc.*
   b. If the other dual-band device is blinking red, it is on the same phase.
      *Device does not connect the phases to SwitchLinc.*
      *Relocate device if necessary (and where practical).*
   c. If the "other" dual-band device is not blinking
      *Device is not within RF range of SwitchLinc.*
      *Device does not connect the phases to SwitchLinc.*
      *Relocate device if necessary (and where practical).*
3) Press Set button once.
   *SwitchLinc will stop beeping.*
   *SwitchLinc LED will turn white.*
   *Other device LEDs will stop blinking.*

---

**X10 Setup**

**Note:** SwitchLinc ships with no X10 address assigned. To assign an X10 address, you will need an X10 controller to transmit it.

**Adding X10 Address**

1) Press and hold SwitchLinc Set button until beep.
   *LED starts blinking green.*
2) From your X10 controller, send the X10 address 3 times (with or without commands).
   *SwitchLinc will double-beep and LED stops blinking.*
3) Test by sending X10 on and off commands.
   *The light/load connected to SwitchLinc will turn on and off.*

**Removing X10 Address**

1) Press and hold SwitchLinc Set button until beep.
   *LED starts blinking green.*
2) Press and hold Set button until beep.
   *LED starts blinking red.*
3) From your X10 controller, send the any X10 address 3 times (with or without commands).
   *SwitchLinc will double-beep and LED stops blinking.*
4) Test by sending X10 on and off commands.
   *The light/load connected to SwitchLinc will not respond.*

**Other X10 Setup**

For other X10 setup instructions, visit [http://www.smarthome.com/insteon-x10-programming.html](http://www.smarthome.com/insteon-x10-programming.html)
Change Paddle and LED Colors

You can swap out the included white LEDs and/or front paddle and trim frame assembly with a color-change kit before or after SwitchLinc is installed. For more information, see the Accessories page on INSTEON.com.

Specifications

<table>
<thead>
<tr>
<th>General</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name</td>
<td>SwitchLinc On/Off - INSTEON Remote Control On/Off Switch (Dual-Band)</td>
</tr>
<tr>
<td>Brand</td>
<td>INSTEON</td>
</tr>
<tr>
<td>Manufacturer Product Number</td>
<td>2477S</td>
</tr>
<tr>
<td>UPC</td>
<td>813922012378</td>
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<tr>
<td>FCC ID</td>
<td>SBP2477S</td>
</tr>
<tr>
<td>Patent Number</td>
<td>7,345,998 U.S., Protected under U.S. and foreign patents (see <a href="http://www.insteon.com">www.insteon.com</a>)</td>
</tr>
<tr>
<td>Warranty</td>
<td>2 years, limited</td>
</tr>
</tbody>
</table>

**INSTEON**

| INSTEON I.D. | 1 |
| INSTEON | 400 responder groups and 1 controller group |
| Maximum Scene Memberships | 400 (Combined controller + responder) |

| Scene Commands Supported as Controller |
|---|---|
| On | Off |
| Fast-On | Fast-Off |
| Begin Bright | Begin Dim |
| End Bright | End Dim |

| Scene Commands Supported as Responder |
|---|---|
| On | Off |
| Fast-On | Fast-Off |

Software Configurable: Yes

RF Range: > 100-Feet Open air

X10 Support: Yes

X10 Addresses: 256 max, unassigned by default

INSTEON Device Category: 0x02

INSTEON Device Subcategory: 0x2A

Mechanical
<table>
<thead>
<tr>
<th>Mounting</th>
<th>Standard, single gang wall box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wires</td>
<td>Line, Load, Ground – 12 AWG</td>
</tr>
<tr>
<td></td>
<td>Neutral – 18 AWG</td>
</tr>
<tr>
<td>Wires</td>
<td>Black – Line (Hot)</td>
</tr>
<tr>
<td></td>
<td>White – Neutral</td>
</tr>
<tr>
<td></td>
<td>Red – Load</td>
</tr>
<tr>
<td></td>
<td>Bare Copper - Ground</td>
</tr>
<tr>
<td>Color</td>
<td>White (color change kits available)</td>
</tr>
<tr>
<td>Set button</td>
<td>Clear</td>
</tr>
<tr>
<td>Air Gap</td>
<td>Set button (when pulled out)</td>
</tr>
<tr>
<td>Plastic</td>
<td>UV Stabilized Polycarbonate</td>
</tr>
<tr>
<td>Beeper</td>
<td>Yes</td>
</tr>
<tr>
<td>Setup LED</td>
<td>1 Dual-Color (green and red)</td>
</tr>
<tr>
<td>Status LEDs</td>
<td>2 white, can be dimmed or disabled (color change kits available)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>4.1” H x 1.78” W x 1.47” D</td>
</tr>
<tr>
<td>Weight</td>
<td>120 grams / 0.26 pounds</td>
</tr>
<tr>
<td>Operating Environment</td>
<td>Indoors</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>32°F - 104°F (0° - 40°C)</td>
</tr>
<tr>
<td>Operating Humidity Range</td>
<td>0-90% relative humidity, non-condensing</td>
</tr>
<tr>
<td>Storage conditions</td>
<td>4°F to +158°F (-20 – 70 degrees Celsius)</td>
</tr>
</tbody>
</table>

**Electrical**

<table>
<thead>
<tr>
<th>Voltage</th>
<th>100-277VAC +/- 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>50/60Hz Auto Detected at power-up</td>
</tr>
<tr>
<td>Maximum Load</td>
<td>17 Amp resistive capacity (100-277VAC)</td>
</tr>
<tr>
<td></td>
<td>1,800 Watt incandescent capacity (100-277VAC)</td>
</tr>
<tr>
<td></td>
<td>1 HP motors (at 120VAC only)</td>
</tr>
<tr>
<td></td>
<td>10 Amps Ballast (100-277VAC)</td>
</tr>
<tr>
<td>Surge Resistance</td>
<td>Up to 500 VAC</td>
</tr>
<tr>
<td>Retains all settings without power</td>
<td>Yes, all saved in Non-volatile EEPROM</td>
</tr>
<tr>
<td>Standby power consumption</td>
<td>&lt; 1 watt</td>
</tr>
<tr>
<td>Safety Approved</td>
<td>ETL (Intertek Testing Services)</td>
</tr>
<tr>
<td>Certifications</td>
<td>FCC, IC Canada</td>
</tr>
</tbody>
</table>
## Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The LED bar on SwitchLinc is not turning on and connected load is not turning on.</td>
<td>SwitchLinc is not getting power.</td>
<td>Make sure the circuit breaker is turned on. Check junction box wires to ensure all connections are tight and no bare wires are exposed. Check the light fixture to ensure all connections are tight and no bare wires are exposed.</td>
</tr>
<tr>
<td>The switch I’m replacing only has two wires.</td>
<td>SwitchLinc requires a Neutral wire in order to operate.</td>
<td>Look in the rear of the junction box for a white wire bundle tied with a wire nut. Those are the Neutral wires. Connect the Neutral SwitchLinc wire there.</td>
</tr>
<tr>
<td>SwitchLinc unexpectedly turns on.</td>
<td>Another controller, a timer or a stray X10 command was received.</td>
<td>Install a powerline signal blocker in your home to keep X10 signals from neighboring homes from interfering. Consider not using SwitchLinc in X10 mode. If the above doesn't work, perform a factory reset. (See Factory Reset.)</td>
</tr>
<tr>
<td>SwitchLinc responds to scene ons but not offs.</td>
<td>The connected load is producing electrical noise that is interfering with the reception of powerline signal when load is turned on and SwitchLinc is not within RF range.</td>
<td>Move or add an Access Point or dual-band product nearer SwitchLinc.</td>
</tr>
<tr>
<td>SwitchLinc responds to scene offs but not ons.</td>
<td>SwitchLinc is scene responder at off.</td>
<td>Re-add SwitchLinc to scene with the load on.</td>
</tr>
<tr>
<td>When I press a button on SwitchLinc, it takes a long time for its responders to respond.</td>
<td>You may have uninstalled an INSTEON responder but not removed the link to SwitchLinc. SwitchLinc is trying to send commands to the missing INSTEON device.</td>
<td>If the INSTEON device is still available, remove it from SwitchLinc scene as a responder. (See Removing SwitchLinc as an INSTEON Controller.) Perform a factory reset. (See Factory Reset.)</td>
</tr>
<tr>
<td>SwitchLinc is locked up.</td>
<td>A surge or excessive noise on the power line may have caused a glitch.</td>
<td>Pull out the Set button on SwitchLinc to create an air gap for 10 seconds, then push it back in until it is flush with the trim frame (don't push it all the way in). If the above doesn't work, perform a factory reset. (See Factory Reset.)</td>
</tr>
<tr>
<td>SwitchLinc can turn off my responder, but nothing happens when I send an on command.</td>
<td>Your responder may be added to the scene in its off state.</td>
<td>Re-add your responder to a SwitchLinc scene while the responding device is on.</td>
</tr>
<tr>
<td>Status LEDs are too bright.</td>
<td>LEDs are set at too high a brightness level.</td>
<td>Dim the LEDs. (See Changing LED Brightness.)</td>
</tr>
<tr>
<td>SwitchLinc won’t add to scene as a responder.</td>
<td>The controller may have dropped out of Add to Scene mode, or added another device to scene.</td>
<td>Try adding SwitchLinc to a scene on the controller again.</td>
</tr>
<tr>
<td></td>
<td>The INSTEON signal may not be reaching the “vicinity” of SwitchLinc. Large appliances, such as refrigerators or air conditioners, may be producing electrical noise on the powerline.</td>
<td>Make sure phases are detected, add additional INSTEON devices and/or move around existing INSTEON devices. Install a powerline noise filter (such as a FilterLinc #1626-10) to filter electrical noise and minimize signal attenuation.</td>
</tr>
<tr>
<td></td>
<td>Other electrical devices, such as computers, televisions or power strips, may be absorbing the INSTEON signal.</td>
<td></td>
</tr>
<tr>
<td>SwitchLinc is taking a long time to respond to a controller.</td>
<td>The controller may be sending commands to a responder that is no longer available, causing delays.</td>
<td>Remove all unused responders from scene controller. If the above doesn’t work, perform a factory reset on the controller. (See Factory Reset.)</td>
</tr>
<tr>
<td>SwitchLinc is not receiving signals from X10 controllers.</td>
<td>SwitchLinc and the controller are on opposite powerline phases. The controller is plugged into a power strip.</td>
<td>Install an Access Point to properly bridge the two powerline phases. Powerline signals can’t travel through power filters. Plugging the controller directly into a wall outlet works best.</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Other modules are loading down the signal.</td>
<td></td>
<td>Move the other modules or the controller to another outlet.</td>
</tr>
</tbody>
</table>
Certification and Warranty

Certification
This product has been thoroughly tested by Intertek ETL, a nationally recognized independent third-party testing laboratory. The North American ETL Listed mark signifies that the device has been tested to and has met the requirements of a widely recognized consensus of U.S. and Canadian device safety standards, that the manufacturing site has been audited, and that the manufacturer has agreed to a program of quarterly factory follow-up inspections to verify continued conformance.

FCC and Industry Canada Compliance Statement
This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS-210. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Changes or modifications to this unit voids the user’s authority to operate this product and the manufacturer’s warranty

The digital circuitry of this device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15B of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio and television reception. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause such interference, which can be verified by turning the device off and on, the user is encouraged to eliminate the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna of the device experiencing the interference
- Increase the distance between this device and the receiver
- Connect the device to an AC outlet on a circuit different from the one that supplies power to the receiver
- Consult the dealer or an experienced radio/TV technician

WARNING: Changes or modifications to this device not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

Limited Warranty
Seller warrants to the original consumer purchaser of this product that, for a period of two years from the date of purchase, this product will be free from defects in material and workmanship and will perform in substantial conformity to the description of the product in this Owner’s Manual. This warranty shall not apply to defects or errors caused by misuse or neglect. If the product is found to be defective in material or workmanship, or if the product does not perform as warranted above during the warranty period, Seller will either repair it, replace it, or refund the purchase price, at its option, upon receipt of the product at the address below, postage prepaid, with proof of the date of purchase and an explanation of the defect or error. The repair, replacement, or refund that is provided for above shall be the full extent of Seller’s liability with respect to this product. For repair or replacement during the warranty period, call the INSTEON Support Line at 800-762-7845 with the Model # and Revision # of the device to receive an RMA# and send the product, along with all other required materials to:

INSTEON
ATTN: Receiving
16542 Millikan Ave.
Irvine, CA 92606-5027

Limitations
The above warranty is in lieu of and Seller disclaims all other warranties, whether oral or written, express or implied, including any warranty or merchantability or fitness for a particular purpose. Any implied warranty, including any warranty of merchantability or fitness for a particular purpose, which may not be disclaimed or supplanted as provided above shall be limited to the two-year of the express warranty above. No other representation or claim of any nature by any person shall be binding upon Seller or modify the terms of the above warranty and disclaimer.

Home automation devices have the risk of failure to operate, incorrect operation, or electrical or mechanical tampering. For optimal use, manually verify the device state. Any home automation device should be viewed as a convenience, but not as a sole method for controlling your home.

In no event shall Seller be liable for special, incidental, consequential, or other damages resulting from possession or use of this device, including without limitation damage to property and, to the extent permitted by law, personal injury, even if Seller knew or should have known of the possibility of such damages. Some states do not allow limitations on how long an implied warranty lasts and/or the exclusion or limitation of damages, in which case the above limitations and/or exclusions may not apply to you. You may also have other legal rights that may vary from state to state.

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